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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,623	05/15/2001	Stephen K. Vernon	15-0259	8013

7590

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EXAMINER
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FERRIS, DERRICK W

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

**Application No.**

09/854,623

**Applicant(s)**

VERNON, STEPHEN K.

**Examiner**

Derrick W. Ferris

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/15/2001</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. **Claim 16** is objected to because of the following informalities: please change “the” to “a” in line 6 with respect to the first occurrence of “the low pass filter” since “the” lacks antecedent basis. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-4 and 11-14** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application 2002/0110134 A1 to *Gracon et al.* (“*Gracon*”).

As to **claim 1**, see figure 1 where a “delay device” (i.e., delay processor) is traffic management system 100. In particular, note that ingress ports 108 and egress ports 128 such that the device is inserted in the middle of the network. As such, a packet handled by packet identifying information, e.g., a packet descriptor, where such packet identifying information identifies a packet stream. One example of a data stream is a virtual connection as taught by the reference. Since the traffic management system 100 switches the packets to a respective egress port, the system routes the data stream through the delay device. Each packet stream is delayed using various techniques such as scheduling. Hence the packet scheduler 206 uses predefined or configured rates in a table as part of

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congestion parameters, see e.g. page 2 paragraph 0028-0030. Examiner also notes that traffic policing 202 and the congestion manager 204 in addition to the traffic scheduler 206 also play a role in delaying the selected data by a fixed amount.

As to **claim 2**, each data stream is stored in buffers 116. In addition, each virtual connection also has virtual queues, see e.g., paragraph 0031 on page 2.

As to **claim 3**, congestion parameters are stored in a congestion table, see e.g., page 2, paragraph 0028.

As to **claim 4**, since the packets are scheduled, the round trip latency is affected.

As to **claim 11**, see similar rejection to claim 1. With respect to a low pass filter, see e.g., paragraph 0045 on page 4.

As to **claim 12**, see similar rejection to claim 2.

As to **claim 13**, see similar rejection to claim 3.

As to **claim 14**, see similar rejection to claim 4.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 5-10 and 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over .S. Patent Application 2002/0110134 A1 to *Gracon et al.* ("*Gracon*") in view of U.S. Patent No. 6,732,168 B1 to *Bearden et al.* ("*Bearden*").

As such to **claim 5**, *Gracon* discloses a delay processor as traffic management system 100. Examiner also notes one could argue that *Gracon* also teaches a client processor as the packet ingress processor 102 and a server processor as packet egress processor 126. However, the rejection below also provides a different interpretation.

*Gracon* is silent or deficient to the further limitation wherein the network includes one client processor, at least one server processor, and at least one network router.

*Bearden* teaches the further recited limitation above at e.g., in figure 4. In particular, a client processor is shown as client station 409-1, a server processor is shown e.g., as service server 408-x (or another client processor 409-1) and a router is shown as part of the Internet cloud, see e.g., column 6, lines 1-25.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Gracon* by inserting the traffic management system into the Internet cloud 406.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be that QoS is performed in the Internet cloud or middle of the network. In particular, *Gracon* cures the above-cited deficiency by providing a motivation found at e.g., figure 4. Second, there would be a reasonable expectation of success since QoS includes traffic shaping and policing, see e.g., column 6, lines 1-24 of *Bearden*. Thus the references either in singular or in combination teach the above claim limitation(s).

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As to **claim 6**, see similar rejection to claim 5. A first processor could be a client processor and a second processor could be a server processor as mentioned above.

As to **claim 7**, see similar rejection to claim 5.

As to **claim 8**, see similar rejection to claim 2.

As to **claim 9**, see similar rejection to claim 1.

As to **claim 10**, see similar rejection to claim 3.

As to **claim 15**, see similar rejection to claim 5.

As to **claim 16**, see combined similar rejections to claims 6 and 11.

As to **claim 17**, see similar rejection to claim 7.

As to **claim 18**, see similar rejection to claim 8.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123.

The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

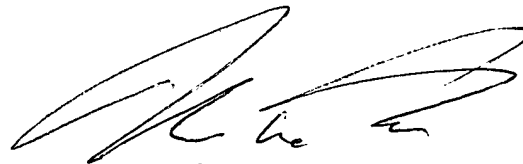
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris  
Examiner  
Art Unit 2663

*DW*  
DWF



Derrick W. Ferris  
1/5/2005